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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEVEN MAURICE SIKORSKI

Appeal 2009-1371
Application 10/748,992
Technology Center 2600

Decided:¹ May 22, 2009

Before ALLEN R. MACDONALD, MAHSHID D. SAADAT, and
BRADLEY W. BAUMEISTER, *Administrative Patent Judges*.

MACDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 CFR § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Data (electronic delivery).

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 18-37. We have jurisdiction under 35 U.S.C. § 6(b).

We Vacate and Enter a New Ground of Rejection.

STATEMENT OF THE CASE

According to Appellant, the invention relates to a mobile scanning terminal device with automatic display inversion and/or rotation capabilities.² After and/or during rotation of the mobile scanning terminal device, a display can be concurrently inverted and/or rotated in order to present the display appropriately (*e.g.*, right-side up) with respect to the user.³

Exemplary Claim

18. A mobile scanning terminal system, comprising:

an image capture component that captures optical signals related to a product, the capture corresponds to inversion or rotation of the system;

an image analysis component that analyzes and determines product identity based at least in part upon the optical signals; and

a display that displays information associated with the product and inverts or rotates the information to an optimal viewing orientation,

² See Spec. 4:7-10.

³ See Spec. 8:1-3.

regardless of the orientation of the system, thereby efficiently relaying data to the user.

Prior Art

The Examiner relies on the following prior art references to show unpatentability:

Hoon	US 2002/0186878 A1	Dec. 12, 2002
Melaku	US 2003/0144793 A1	Jul. 21, 2003
Cardno	US 2004/0036712 A1	Feb. 26, 2004 (filed May 23, 2003)
Browning	US 6,707,581 B1	Mar. 16, 2004 (filed Jun. 27, 2000)
Manchester	US 2004/0201595 A1	Oct. 14, 2004 (filed Apr. 11, 2003)

We rely on the following prior art reference to show unpatentability:

Cheatle	US 7,305,146 B2	Dec. 4, 2007 (filed May 20, 2002)
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Examiner's Rejections

1. The Examiner rejected claims 18-21, 23, 24, and 29-37 under 35 U.S.C. § 103(a) as unpatentable over Browning and Manchester.
2. The Examiner rejected claims 22 and 25 under 35 U.S.C. § 103(a) as unpatentable over Browning, Manchester and Hoon.
3. The Examiner rejected claims 26-28 under 35 U.S.C. § 103(a) as unpatentable over Browning, Manchester, Melaku, and Cardno.

ISSUE

The issue before us is whether the prior art teaches or suggests image capture that corresponds to inversion or rotation of the system.

FINDINGS OF FACT

1. The Examiner found Browning teaches a mobile device, as Browning discloses "[t]he software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner" (Ans. 3).
- 2.A. The Examiner also found that Browning discloses an analysis component, as Browning, with reference to Figure 3, discloses "the scan head (16), decoder, and other integrated circuits are controlled by means of a microprocessor that is programmed with instructions to carry out the method of Browning" (Ans. 4).

2.B. Further, the Examiner found Browning determines product identity, as Browning discloses (1) "[t]he handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image," and (2) "[i]n a playback mode, the retrieved information is displayed to the user immediately upon receipt" (Ans. 4).

2.C. The Examiner found that "[t]his information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent either from a remote source, such as a personal computer or within the handheld scanner itself." (See Ans. 4-5).

2.D. We also find Browning discloses "[t]he best known type of scanner in this category is a bar-code scanner, which might be used to obtain the identification of a product which carries the bar code image, for instance to provide inventory control and/or pricing information." "In the case of scanned text, an image of the text can first be presented to an on-board OCR engine, allowing user display and verification before the information is provided to the information retrieval software." (See Browning, col. 1, ll. 26-31, 37-41).

3. We find Cheattle discloses (1) "[a]n image 40 is captured using an optical lens system 42 that focuses the optical image onto an image array 44"; (2) "[t]he image array 44 produces an electronic signal representative of

the image"; (3) "[a] tilt sensor 46 is also included in the camera system to provide indication of the angle at which the camera is held and provides a signal indicative of the rotation of the camera to an angle input 48 of the image processor 52"; and (4) "[t]he image processor 52 is arranged to generate one or more crop boundaries according to the above described method of the present invention to correct the tilt of the original image" (*See* Cheatle, col. 6, ll. 39-50).

4. We also find Cheatle discloses "[t]he corrected output may either be stored on an image recording means 54, such as a hard disk, ram card or other storage means, or may alternatively or additionally be displayed on a display means 56 (*See* Cheatle, col. 6, ll. 50-54).

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). Discussing the question of obviousness of claimed subject matter involving a combination of known elements, *KSR Int'l v. Teleflex, Inc.*, 550 U.S. 398 (2007), explains:

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a

person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill. *Sakraid v. AG Pro, Inc.*, 425 U.S. 273 (1976) and *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57 (1969) are illustrative—a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.

Id. at 417. If the claimed subject matter cannot be fairly characterized as involving the simple substitution of one known element for another or the mere application of a known technique to a piece of prior art ready for the improvement, a holding of obviousness can be based on a showing that “there was an apparent reason to combine the known elements in the fashion claimed.” *Id.* at 418. Such a showing requires:

“‘some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”

Id. at 418 (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

If the Examiner's burden is met, the burden then shifts to the Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

ANALYSIS

Representative claim 18 recites "an image capture component that captures optical signals related to a product, the capture corresponds to inversion or rotation of the system" (App. Br. 9).

Appellant contends, according to the invention, an image capture can correspond to the inversion and/or rotation of the system (App. Br. 6). Thus, Appellant argues, "if user A sends the captured image B to another entity, the image B will be seen as right-side up, regardless of the orientation of the mobile scanning terminal when image B was captured" (App. Br. 6).

With regard to Browning, Appellant argues "Browning relates to a handheld PDA or the like that scans text or a barcode and converts the scanned image into alphanumeric text or other computer-readable information" (App. Br. 5). Appellant contends that the "Examiner concedes that Browning is silent with respect to orienting images on a display" (Reply Br. 3). Further, Appellant argues that the "Examiner cites no passage of

Browning describing altering orientation, and simply concludes that in order to function, it must be able to perform this task" (App. Br. 6).

Appellant also argues "Browning indicates that the scanner is in fact quite unable to perform the task of re-orientation" (App. Br. 6). Appellant contends "Browning allows a user to reject a scanned image if it is read unreliably because the scanner was skewed relative to a line of printed text" (emphasis omitted) (App. Br. 6).

Additionally, Appellant argues "Manchester relates to a method for orienting a display image which includes sensing at least one characteristic of an object and determining the orientation of the object from at least one of the sensed characteristics," and fails to make-up for the deficiencies of Browning (App. Br. 6; Reply Br. 3).

With regard to representative claim 18, we agree with the Examiner that Browning teaches or suggests (1) a mobile device that corresponds to the mobile scanning terminal system (*See* FF 1); (2) an image analysis component that analyzes and determines product identity based at least in part upon the optical signals (*See* FF 2A-2D).

However, we agree with Appellant's argument that the "Examiner cites no passage of Browning describing altering orientation, and simply concludes that in order to function, it must be able to perform this task" (App. Br. 6). This argument refers to the claim 18 limitation that "the capture corresponds to inversion or rotation of the system."

While we agree with Appellant that Browning does not describe the "the capture corresponds to inversion or rotation of the system" limitation of claim 18, we find that Cheatle discloses "[a]n image 40 is captured using an optical lens system 42 that focuses the optical image onto an image array 44" (See FF 3). Thus, we find Cheatle teaches or suggests "an image capture component that captures optical signals," as recited in representative claim 18. Further, Cheatle discloses (1) "[a] tilt sensor 46 is also included in the camera system to provide indication of the angle at which the camera is held and provides a signal indicative of the rotation of the camera to an angle input 48 of the image processor 52"; (2) "[t]he image processor 52 is arranged to generate one or more crop boundaries according to the above described method of the present invention to correct the tilt of the original image" (See FF 3); and (3) the corrected output may be stored on an image recording means 54 (See FF 4). We find a skilled artisan would have recognized that Cheatle teaches or suggests that "the capture corresponds to inversion or rotation of the system," as recited in representative claim 18, as the tilt sensor provides an indication of the angle at which the camera is held.

Accordingly, we find Cheatle discloses "an image capture component that captures optical signals related to a product, the capture corresponds to inversion or rotation of the system," as recited in representative claim 18.

Not only does Cheatle disclose correcting the tilt of the original image (See FF 3), but Cheatle also discloses displaying the corrected output (See FF 4). Thus, we find one of ordinary skill in the art would have recognized that Cheatle teaches or suggests "a display that displays information associated with the product and inverts or rotates the information to an optimal viewing orientation, regardless of the orientation of the system, thereby efficiently relaying data to the user," as recited in representative claim 18.

Further, we find that it would have been obvious to one of ordinary skill in the art at the time of the invention to have (1) oriented the handheld scanner of Browning, which captured product identity information, in a rotated or inverted manner, as the system of Cheatle was rotated, and (2) incorporated the image capture component of Cheatle into Browning, such that the captured image would have corresponded to the inversion or rotation of the system; and (3) displayed the corrected image.

We find that the prior art Browning, Manchester, and Cheatle references describe all the limitations required by claim 18. Further, we find that a skilled artisan would have recognized that the combination of Browning, Manchester, and Cheatle was obvious, as the combination would have simply been an arrangement of old elements with each performing the same function it had been known to perform, and would have yielded no

more than one would have expected from such an arrangement (*See KSR* at 417).

We vacate the Examiner's conclusion that claims 18-37 are obvious and, based on the Examiner's and our findings, we substitute our own conclusion, that claim 18 is unpatentable under 35 U.S.C. § 103 as being obvious over Browning, Manchester, and Cheatle.

Remaining Claims

The Board of Patent Appeals and Interferences is a review body, rather than a place of initial examination. We have made a rejection above under 37 C.F.R. § 41.50(b). However, we have not reviewed the remaining claims 19-37 to the extent necessary to determine whether these claims are unpatentable under 35 U.S.C. § 103. We leave it to the instant Examiner to determine the appropriateness of any further rejections based thereon.

37 CFR § 41.50(b)

Section 41.50(b) also provides that the Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the

examiner, in which event the proceeding will be remanded to the examiner....

(2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record....

DECISION

1. We have vacated the Examiner's rejection of claims 18-37.
2. We have entered a new ground of rejection under 37 C.F.R. § 41.50(b) for claim 18, as failing to recite patentable subject matter under 35 U.S.C. § 103(a).

This decision contains a new ground of rejection pursuant to 37 C.F.R. § 41.50(b). That section provides that “[a] new ground of rejection ... shall not be considered final for judicial review.”

Since we have entered a new rejection, our decision is not a final agency action.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

VACATED
37 C.F.R. § 41.50(b)

rwk

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